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10/811,234

03/26/2004

Craig A. Hobbs

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7590

06/27/2006

Christopher J. Leonard
Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

EXAMINER

SAIN, GAUTAM

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,234

Applicant(s)

HOBBS ET AL.

Examiner

Gautam Sain

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

- 1) This is a NonFinal rejection in response to the application filed on 3/26/2004.
- 2) Claims 1-27 are pending.
- 3) Effective filing date is 3/26/2004.

Information Disclosure Statement

- 4) The information disclosure statement filed 5/9/2006 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

The document filed on 5/9/2006 is not in the form of an information disclosure statement and does not provide sufficient information for the Examiner to review and consider the information provided. The document presents factual evidence relating to the patentability of the invention without proper affidavit support. Accordingly, the document is acknowledge as having been received, but has not been considered by the Examiner.

Claim Rejections - 35 USC § 101

5) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5-1) Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-26 set forth functional descriptive material but fail to set forth physical structures or materials comprising of hardware or a combination of hardware and software within the technological arts (i.e. a computer) to produce a "useful, concrete and tangible" result. For example, claims 1 and 17, the system and method, respectively, read on a mental construct/abstract idea or at best a computer program, per se. The language of claims 1-26 does not clearly define structural elements and does not provide for a tangible embodiment on a computer readable medium. Claims 1-26 are interpreted as software per se, abstract ideas or mental constructs and not tangibly embodied on a computer readable medium or hardware.

Claim Rejections - 35 USC § 102

6) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6-1) Claims 1-3, 6, 7, 17-21, 23, 24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Nonpatent Literature Microsoft Excel 2000 (as described in the book “Using Microsoft Excel 2000”, by Angie Wethington, published by Que corporation, May 1999, pages 545 - 549)(hereinafter “Excel”).

Regarding claim 1, Excel teaches *a spreadsheet cell operative to receive data; and a spreadsheet function operative to restrict data entered into the spreadsheet cell to a prescribed data range*. Specifically, Excel discloses data validation that enable someone to tell Excel to accept only data values that are between a described range, apply validations to numbers, times, dates, etc. (see Excel pages 545-549).

Regarding claim 2, Excel teaches a spreadsheet application system is operative in response to the spreadsheet function to restrict data entered into the spreadsheet cell to within a prescribed inclusive bound range. Fig 19.23 on page 547 shows date validation for allowing dates between a specific start date and a specific end date.

Regarding claim 3, Excel teaches the inclusive bound range includes a bound minimum value and a maximum value. Fig 19.23 on page 547 shows date validation for allowing dates between a specific start date and a specific end date, where the start date is an example of a minimum value and the end date is an example of a maximum.

Regarding claim 6, Excel teaches where the spreadsheet application is operative in response to the spreadsheet function to restrict data entered into the spreadsheet cell to outside a prescribed exclusive data bound range. Fig 19.23 on page 547 shows a selectable dropdown list labeled “Data” and the option selected for this example is “between”, however, the user also has the option of selecting “not between”, in which case the date validation for allowing dates will be for dates that are not between a specific start date and a specific end date.

Regarding claim 7, Excel teaches the exclusive bound range includes a bound minimum value and a maximum value. Fig 19.23 on page 547 shows a selectable dropdown list labeled “Data” and the option selected for this example is “between”, however, the user also has the option of selecting “not between”, in which case the date validation for allowing dates will be for dates that are not between a specific start date and a specific end date.

Regarding independent claims 17 and 27, Excel teaches *applying a data bounding function to the spreadsheet application for prescribing valid data that may be entered into the spreadsheet application cell; and if the data entered into the spreadsheet application cell is not valid data prescribed by the data bounding function, preventing the data from entry into the spreadsheet application cell*. Specifically, Excel discloses data validation that enable someone to tell Excel to accept only data values that are between a described range, where the parameters can be set up to prevent incorrect information completely, apply validations to numbers, times, dates, etc. (see Excel pages 545-549).

Regarding claim 18, Excel teaches determining whether the data bounding function is disabled from operation with respect to the spreadsheet application cell. Fig 19.23 on page 547 shows a selectable dropdown list labeled “Allow” and the option selected for this example is “Date”, however, when the user selects the option “Any value”, the range validation options is disabled and the cell can accept any value.

Regarding claim 19, Excel teaches if the data bounding function is not disabled from operation with respect to the spreadsheet application cell, parsing the data bounding function to obtain any data bounding pairs, whereby said data bounding pairs represent a prescribed data bound range. Specifically, Excel discloses a special validation feature to find and mark invalid data that was previously entered, prior to validation and the user wants to go back and fix existing errors (see Excel page 549, bottom).

Regarding claim 20, Excel teaches determining whether the data bounding pairs represent an inclusive bound range in to which valid data entered into the spreadsheet application cell must fall. Fig 19.23 on page 547 shows date validation for allowing dates between a specific start date and a specific end date.

Regarding claim 21, Excel teaches *determining whether the data entered into the spreadsheet application cell falls within the inclusive bound range; if the data entered into the spreadsheet application cell falls within the inclusive bound range, entering the data into the spreadsheet application cell; and if the data entered into the spreadsheet application cell falls outside the inclusive bound range, preventing entry of the data into the spreadsheet application cell.* Fig 19.23 on page 547 shows date validation for allowing dates between a specific start date and a specific end date. If the date is within

the range of dates, then allow the user to input the dates, but if the date is not within the range of dates, then prevent incorrect information from the cell (see page 546).

Regarding claim 23, Excel teaches determining whether the data bounding pairs represent an exclusive bound range outside of which valid data entering into the spreadsheet cell must fall. Fig 19.23 on page 547 shows a selectable dropdown list labeled "Data" and the option selected for this example is "between", however, the user also has the option of selecting "not between", in which case the date validation for allowing dates will be for dates that are not between a specific start date and a specific end date.

Regarding claim 24, Excel teaches determining whether the data entered into the spreadsheet application cell falls outside the exclusive bound range; if the data entered into the spreadsheet application cell falls outside the exclusive bound range, entering the data into the spreadsheet application cell; and if the data entered into the spreadsheet application cell falls inside the exclusive bound range, preventing entry of the data into the spreadsheet application cell. Fig 19.23 on page 547 shows a selectable dropdown list labeled "Data" and the option selected for this example is "between", however, the user also has the option of selecting "not between", in which case the date validation for allowing dates will be for dates that are not between a specific start date and a specific end date. In this case, if the entered date is between the start and end dates, then the date is incorrect and not allowed, and if the date is before or after the start and end dates, respectively, then the date is allowed and entered.

Claim Rejections - 35 USC § 103

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7-1) Claims 4, 5, 8, 9, 10, 22, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel (as cited above).

Regarding claim 4, Excel does not expressly teach, but does suggest where the spreadsheet application is further operative in response to the spreadsheet function to select one of the bound minimum value or the bound maximum value for the entry into the spreadsheet cell if the data entered into the spreadsheet cell is outside the inclusive bound range. Specifically, Excel discloses the validation process that allows the user to go ahead and enter invalid data after displaying a warning, where the user enters invalid data (see page 549, bottom). The user can be issued a warning and instructed to enter in the minimum or maximum data value as the only option and instruct the user to enter valid data such as the minimum or maximum.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel to include allowing the user to enter a value after receiving an warning message that would be either the minimum or maximum value of the range as suggested by Excel, providing the benefit of enabling the user to apply parameters for cells and warn the user but allowing them the flexibility of allowing the entry of the

date (see Excel, page 546) where the user can be alerted to a customized warning message that tells them that they must enter values inclusive of a certain range. This is performed as a measure of attempting to ensure desired valid data in spreadsheet cells, which was a well known goal.

Regarding claim 5, Excel does not expressly teach, but does suggest where the spreadsheet application is further operative in response to the spreadsheet function to select one of the bound minimum value or the bound maximum value that has the closest absolute value distance from the data entered into the spreadsheet cell. Specifically, Excel discloses the validation process that allows the user to go ahead and enter invalid data after displaying a warning, where the user enters invalid data (see page 549, bottom). The user can be issued a warning and instructed to enter in the minimum or maximum data value as the only option and instruct the user to enter valid data such as the minimum or maximum.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel to include allowing the user to enter a value after receiving an warning message that would be either the minimum or maximum value of the range as suggested by Excel, providing the benefit of enabling the user to apply parameters for cells and warn the user but allowing them the flexibility of allowing the entry of the date (see Excel, page 546) where the user can be alerted to a customized warning message that tells them that they must enter values inclusive of a certain range. This is performed as a measure of attempting to ensure desired valid data in spreadsheet cells, which was a well known goal.

Regarding claim 8, Excel does not expressly teach, but does suggest where the spreadsheet application is further operative in response to the spreadsheet function to select one of the bound minimum value or the bound maximum value for the entry into the spreadsheet cell if the data entered into the spreadsheet cell is inside the exclusive bound range. Specifically Excel discloses the validation process that allows the user to go ahead and enter invalid data after displaying a warning, where the user enters invalid data (see page 549, bottom). The user can be issued a warning and instructed to enter in the minimum or maximum data value as the only option and instruct the user to enter valid data such as the minimum or maximum.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel to include allowing the user to enter a value after receiving an warning message that would be either the minimum or maximum value of the range as suggested by Excel, providing the benefit of enabling the user to apply parameters for cells and warn the user but allowing them the flexibility of allowing the entry of the date (see Excel, page 546) where the user can be alerted to a customized warning message that tells them that they must enter values exclusive of a certain range. This is performed as a measure of attempting to ensure desired valid data in spreadsheet cells, which was a well known goal.

Regarding claims 9 and 25, Excel does not expressly teach, but does suggest where the spreadsheet application is further operative in response to the spreadsheet function to select one of the bound minimum value or the bound maximum value that has a closest absolute value distance from the data entered into the spreadsheet cell.

Specifically Excel discloses the validation process that allows the user to go ahead and enter invalid data after displaying a warning, where the user enters invalid data (see page 549, bottom). The user can be issued a warning and instructed to enter in the minimum or maximum data value as the only option and instruct the user to enter valid data such as the minimum or maximum.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel to include allowing the user to enter a value after receiving an warning message that would be either the minimum or maximum value of the range as suggested by Excel, providing the benefit of enabling the user to apply parameters for cells and warn the user but allowing them the flexibility of allowing the entry of the date (see Excel, page 546) where the user can be alerted to a customized warning message that tells them that they must enter values exclusive of a certain range. This is performed as a measure of attempting to ensure desired valid data in spreadsheet cells, which was a well known goal.

Regarding claims 10 and 26, Excel teaches where the spreadsheet application is further operative in response to the spreadsheet function to create an overlapping exclusive bound range from two or more exclusive bound ranges, whereby the lowest bound minimum value of the overlapping bound ranges is selected as an overlapping exclusive bound range minimum value, and whereby a highest bound maximum value from the overlapping bound ranges is selected as an overlapping exclusive bound range maximum value. The Examiner interprets this claim as creating an exclusive bound range. Fig 19.23 on page 547 shows a selectable dropdown list labeled "Data" and the

option selected for this example is “between”, however, the user also has the option of selecting “not between”, in which case the date validation for allowing dates will be for dates that are not between a specific start date and a specific end date.

Regarding claim 22, Excel does not expressly teach, but does suggest if the data entered into the spreadsheet application cell falls outside the inclusive bound range, entering into the spreadsheet application cell one of a lower endpoint of the inclusive bound range or an upper endpoint of the inclusive bound range that has the shortest absolute value distance from the data entered into the spreadsheet. Specifically, Excel discloses the validation process that allows the user to go ahead and enter invalid data after displaying a warning, where the user enters invalid data (see page 549, bottom). The user can be issued a warning and instructed to enter in the minimum or maximum data value as the only option and instruct the user to enter valid data such as the minimum or maximum.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel to include allowing the user to enter a value after receiving an warning message that would be either the minimum or maximum value of the range as suggested by Excel, providing the benefit of enabling the user to apply parameters for cells and warn the user but allowing them the flexibility of allowing the entry of the date (see Excel, page 546) where the user can be alerted to a customized warning message that tells them that they must enter values inclusive of a certain range. This is performed as a measure of attempting to ensure desired valid data in spreadsheet cells, which was a well known goal.

7-2) Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Excel (as cited above), in view of Stewart et al (US 2004/0006762, filed Jul 3, 2002)

Regarding claim 11, Excel does not expressly teach, but Stewart teaches a spreadsheet function is a BOUND function of the form Bound(value, type, disabled, boundMin, boundMax, [disabled,boundMin, boundMax]). The Examiner interprets this limitation to be claiming the **form** of the function Bound, which is interpreted as a standard function, "functionname(parameter1, parameter, parameter, ...)", as defined by well established programming languages like C/C++. Stewart discloses an example of a function call which is equivalent to the form of the claimed limitation (for example, Fig 7, item 209 describes "Function foo(optional X1 As Variant, _ Optional X2 As Variant, - ...).").

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excell's teaching of Data validation to apply ranges to cells and keeping information within certain boundaries (see Excel, page 546) to include a function with a name and parameters as taught by Stewart, providing the benefit of a system and method for creation of software components for automatically generating Component Object Model components for use by an application program, such as spreadsheets (Stewart, para 6, para 15).

7-3) Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Excel, in view of Stewart et al (as cited above), further in view of Althoff et al (US 6374252, issued Apr 2002).

Regarding Claim 12, Excel in view of Stewart does not expressly teach the value argument identifies the data entered into the spreadsheet cell, but Althoff suggests it. Althoff discloses the property of a valid value in each object of class for a database (col 16, line 29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel's teaching of spreadsheet cells that take a value in view of Stewart to include a data property of a valid value for objects in a database as taught by Althoff, providing the benefit of providing a method of compilation of related data objects in a database (Althoff, col 3, lines 4-9), including spreadsheet programs (col 31, line 26).

Regarding Claim 13, Excel in view of Stewart does not expressly teach the type argument identifies the type of the Bound function, whereby the type of the bound function may be identified as an inclusive bound function, an exclusive Bound function or a disabled bound function, but Althoff suggests it. Althoff discloses the property of a data type of each object for the name of data type as defined by relational database engine for a database (Althoff, col 16, line 8; Table 3-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel's teaching of data validation to apply ranges to cells and keeping information within certain boundaries (see Excel, page 546) in view of Stewart to include a data type of each object for the name of data type as defined by relational

database engine for a database as taught by Altoff, providing the benefit of providing a method of compilation of related data objects in a database (Altoff, col 3, lines 4-9), including spreadsheet programs (col 31, line 26).

Regarding Claim 14, Excel in view of Stewart does not expressly teach the disabled argument identifies a Bound function that is disabled from operation with respect to the spreadsheet cell, but Altoff suggests it. Altoff discloses the cascade flag which is either true or false and upon the condition being true, it allows the system to look up values for a database (col 17, line 6; Table 3-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel teaching of data validation to apply ranges to cells and keeping information within certain boundaries (see Excel, page 546) in view of Stewart to include flag which is either true or false and upon the condition being true, it allows the system to look up values for a database as taught by Altoff, providing the benefit of providing a method of compilation of related data objects in a database (Altoff, col 3, lines 4-9), including spreadsheet programs (col 31, line 26).

Regarding Claim 15, Excel in view of Stewart does not expressly teach the boundMin argument identifies a lower bound value of the prescribed data range, but Altoff suggests it. Altoff discloses a property of Minimum Value, which defines the minimum valid value for an object in the database (col 16, lines 55-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel teaching of data validation to apply ranges to cells and keeping information within certain boundaries by defining a minimum value (see Excel,

page 546; see Fig 19.23, "start date") in view of Stewart to include a property of Minimum Value, which defines the minimum valid value for an object in the database as taught by Altoff, providing the benefit of providing a method of compilation of related data objects in a database (Altoff, col 3, lines 4-9), including spreadsheet programs (col 31, line 26).

Regarding Claim 16, Excel in view of Stewart does not expressly teach the boundMax argument identifies a upper bound value of the prescribed data range, but Altoff suggests it. Altoff discloses a property of Maximum Value, which defines the maximum valid value for an object in the database (col 16, lines 55-66).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Excel teaching of data validation to apply ranges to cells and keeping information within certain boundaries by defining a maximum value (see Excel, page 546; see Fig 19.23, "end date") in view of Stewart to include a property of Maximum Value, which defines the maximum valid value for an object in the database as taught by Altoff, providing the benefit of providing a method of compilation of related data objects in a database (Altoff, col 3, lines 4-9), including spreadsheet programs (col 31, line 26).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam Sain whose telephone number is 571-272-4096. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100